

HW ANSWERS p. 383:

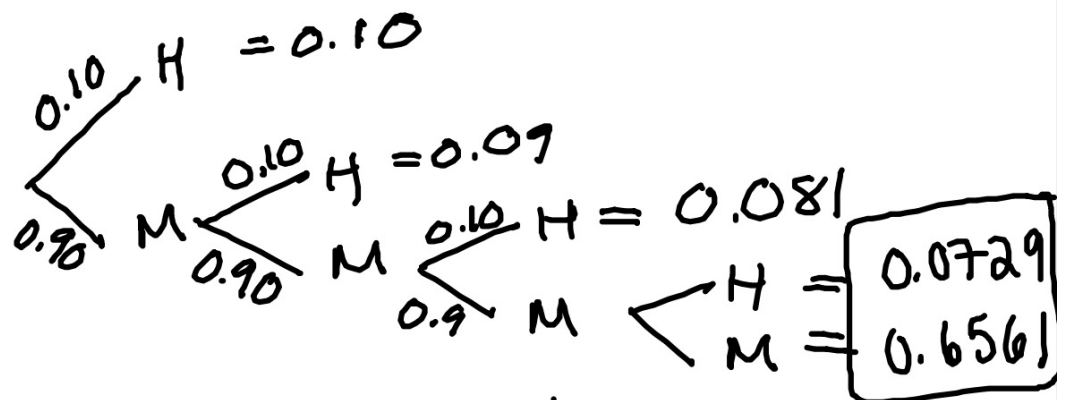
2) (a) $1.2 = \mu_x$
(b) $280 = \mu_x$

10) (a) $0.75 = \sigma_x$
(b) $87.18 = \sigma_x$

$$X \rightarrow L_1$$

$$P(x) \rightarrow L_2$$

1 var stats L_1, L_2



6) (a)

# darts	1	2	3	4
prob	0.10	0.09	0.081	0.729
gain	\$95	\$90	\$85	\$80
prob	0.10	0.09	0.081	0.073
				0.656

(b) 3.44 darts = μ_x

(c) \$17.20 = μ_x

14) \$51.48

18) (a)

Profit	\$100	-\$9900	-\$2900
prob.	0.9975	0.0005	0.002

none major minor

$\frac{1}{2000}$ $\frac{1}{500}$

(b) \$89.90 = μ_x

(c) \$260.54 = σ_x

p. 340

38) (a) $P(S \cap S \cap S^c \cap S^c \cap S^c) = 0.01382$

(b) $P(S^c \cap S^c \cap S^c \cap S) = 0.0921$

(c) $P(S \cap S \cap S \cap S \cap S) = 0.0000759$

(d) $1 - P(S^c \cap S^c \cap S^c \cap S^c \cap S^c) = 0.5563$